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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,027	08/29/2001	Lakshmi Kutty Cheeniyil	70006393-1	9525

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

VIG, NARESH

ART UNIT	PAPER NUMBER
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3629

MAIL DATE	DELIVERY MODE
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10/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/943,027	Applicant(s) CHEENIYIL ET AL.	
	Examiner Naresh Vig	Art Unit 3629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 8-10 is/are rejected.
- 7) ☐ Claim(s) 4-7 and 11-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is reference to communication received 30 July 2007. Addition of claims 11 – 16 is acknowledged. Claims 1 – 16 are pending for examination

Drawings

The replacement drawings were received on 04 May 2004. These drawings are acceptable.

Response to Arguments

In response to applicant's argument that office action mailed 30 April 2007 was properly checked in section 2 of Office Action Summary.

Section 2 of Office Action summary was erroneously marked as Final also. The Office Action mailed 20 April 2007 was a Non-Final office action.

In response to applicant's argument that Office Action equates executing a workflow to building of an application, WFMS to an application building environment, and cited reference asserts that the process instance is migrated to the changed process definition.

However, applicant invention is directed to a workflow which is running on a computer (i.e. computer programs/applications running on a computer system.

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Whenever, there is a change in a process, i.e. a new program/application to be used for the workflow to be able to execute on a computer system with the changed program/application, a new application environment is generated with the changed the changed program/application embedded in the new application environment so the computer system can execute the changed application to provide the changed environment to the user. Cited reference ALU teaches the concept of generating modified application environment by embedding changed program/application and also making appropriate modifications for the programs/application which have a link with the changed application. This clearly shows that the ALU reference can create changed process definitions as claimed by the applicant.

In response to applicant's argument that it is not clear what is Original Process Definition in the cited reference ALU.

The current state of the application is the Original process Definition, the Application output after the execution of nmake becomes the changed process definition.

In response to applicant's argument that with the cited reference ALU, each time an new executable file is created, the previous instance must be brought down.

However, applicant is arguing a limitation not positively claimed by the applicant. Applicant is not positively claimed that the instance is not brought down when changed process definition is created. .

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 11 recites the limitation "the modified process definition" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 3 and 8 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Tutorial: A Little Help With Alcatel-Lucent nmake" hereinafter known as ALU.

Regarding claims 1 and 10, ALU teaches concept of executing a work flow (building of an application) in a Workflow Management System (WFMS), (application building environment) having at least one process instance executing an original

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process definition (e.g. code, object file), and migrating the said process instance to a changed process definition (modified code, new object file). ALU teaches:

checking each process instance during the execution of the original process definition whether the process instance meets a migration condition (if the object file is up to date nmake reads it instead of makefile, otherwise nmake reads the makefile and builds a new objectfile) [ALU, page 16]; and

ALU does not specifically teach migrating each process instance during the execution of the original process definition to a modified process definition if the migration condition is met such that said process instance executes said changed process definition. However, it is old and known to one of ordinary skill in the art that in compilation, when a code is compiled, any modification in the include file are used by the compiler to generate a new running application (e.g .dll, .com, .exe file).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that during execution, compiler compiles new application using up to date code (i.e. code with any new modifications available at the time of compilation) to generate most current application.

defining an original process definition to be executed in a work flow system (makefile);

starting execution of the process instance as per the original process definition (executing nmake);

defining a modified process definition (generating new makefile);

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checking for each process instance whether a migration condition is met (obvious step in generating new makefile);

replacing the nodes of the original process definition in a running process instance satisfying the migration condition by the corresponding nodes of the modified process definition such that said running process instance executes said modified process definition (obvious during compilation).

Regarding claim 2, as responded to earlier, ALU teaches concept of:

defining a set of worst case migration points (makefile), and

migrating the process instance to the modified process definition, if its execution has not gone beyond anyone of said worst case migration points (nmake the new application).

Regarding claim 3, as responded to earlier, ALU teaches concept of:

reading a set of worst case migration points from an user input (makefile).

Regarding claim 8, as responded to earlier, ALU teaches concept of checking whether the node(s) in the original process definition being currently executed is/are also present in the modified process definition (generating new makefile).

Regarding claim 9, as responded to earlier, ALU teaches concept of checking whether a node in the original process definition being currently executed is also

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present in the modified process definition is repeated upon executing of each node(s) of the original process definition until the migration of said process instance is completed (nmake of an application).

Allowable Subject Matter

Claim 4 is deemed to be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

Claims 5 – 7 which claim dependency on claim 4 are also deemed to be allowable.

Claims 11 – 16 are deemed to be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Applicant is required under 37 CFR '1.111 (c) to consider the references fully when responding to this office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naresh Vig whose telephone number is (571) 272-6810. The examiner can normally be reached on Mon-Thu 7:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (571) 272-6812. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "Naresh Vig", with a stylized flourish at the end.

Naresh Vig
Examiner
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October 4, 2007